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AMENDMENT TO THE CLAIMS

1. (currently amended): A method for producing oligomers having less than 40 carbon atoms using at least one aliphatic olefinic monomer ~~having one carbon-carbon double bond selected from the group consisting of ethylene, propylene, butenes, hexenes, octenes and mixtures thereof~~, the method comprising the step of contacting a feed comprising the olefinic monomer under oligomerization conditions with a catalyst composition comprising the reaction product of:

(a) a compound having a formula selected from the group consisting of  $M[S_2C_2(R^aR^b)]_2$  and  $M[S_2C_6(R^1R^2R^3R^4)]_2$ , wherein M is a late transition metal, R<sup>a</sup>, R<sup>b</sup>, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup> are independently selected and may be the same or different and are selected from hydrogen, electron-withdrawing groups and unsubstituted and substituted hydrocarbyl groups; and

(b) an alkylaluminoxane activating cocatalyst,  
whereby an oligomer is formed.

2. (original): The method of claim 1 wherein M is selected from one of Fe, Co, Ni, Pd, and Pt.

3. (previously amended): The method of claim 1 wherein the compound is selected from the group consisting of bis(dithiobenzil) nickel and bis[1,2-bis(trifluoromethyl)ethylene-1,2-dithiolato] nickel.

4. (cancelled)

5. (currently amended): The method of claim 1 4 wherein the cocatalyst is methylaluminoxane.

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6. (original): The method of claim 1 wherein the contacting is at a temperature in the range of from about 0°C to 100°C and at pressures of from about 15 to 2000 psig.
7. (original): The method of claim 1 wherein the contacting is conducted in a solvent.
8. (original): The method of claim 1 wherein the contacting is conducted in a gas phase.
9. (cancelled).
10. (currently amended): The method of claim 1 ~~9~~ wherein said olefinic monomer is ethylene.
11. (original): The method of claim 1 wherein the catalyst composition comprises a supported catalyst composition.
12. (original): The method of claim 11 wherein the supported catalyst composition comprises a silica supported catalyst composition.
13. (original): The method of claim 1 wherein the feed contains contaminants.
14. (original): The method of claim 13 wherein the contaminants comprise sulfur-containing compounds.
15. (previously amended): The method of claim 14 wherein the sulfur-containing compounds comprise H<sub>2</sub>S, mercaptans, sulfides and thiophenes.
16. (currently amended): A method for producing oligomers having less than 40 carbon atoms using at least one aliphatic olefinic monomer ~~having one carbon-carbon double bond selected from the group consisting of ethylene, propylene, butenes, hexenes, octenes and mixtures thereof~~, wherein the olefinic monomer is from a feed stream having sulfur-containing compounds, the method comprising the step of contacting the feed stream under oligomerization conditions with a catalyst composition

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comprising the reaction product of:

- (a) a compound having a formula selected from the group consisting of  $M[S_2C_2(R^aR^b)]_2$  and  $M[S_2C_6(R^1R^2R^3R^4)]_2$ , wherein M is a late transition metal,  $R^a$ ,  $R^b$ ,  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$  are independently selected and may be the same or different and are selected from hydrogen, electron-withdrawing groups and unsubstituted and substituted hydrocarbyl groups; and
- (b) an alkylaluminoxane activating cocatalyst,  
whereby an oligomer is formed.